

Title (en)

REMOTE MAINTENANCE SYSTEM, MONITORING CENTER COMPUTER USED FOR THE SAME, MONITORING SYSTEM AND METHOD OF COMMUNICATION FOR MAINTENANCE

Title (de)

FERNWARTUNGSVORRICHTUNG, ÜBERWACHUNGSCOMPUTER FÜR FERNWARTUNG, ÜBERWACHUNGSVORRICHTUNG UND VERFAHREN ZUR DATENÜBERTRAGUNG FÜR WARTUNG

Title (fr)

SYSTÈME DE TÉLÉMAINTENANCE, ORDINATEUR DE SURVEILLANCE POUR LA TÉLÉMAINTENANCE, SYSTÈME DE SURVEILLANCE ET MÉTHODE DE COMMUNICATION POUR LA MAINTENANCE

Publication

**EP 1655695 B1 20160914 (EN)**

Application

**EP 05024099 A 20051104**

Priority

- JP 2004321440 A 20041105
- JP 2005293121 A 20051006

Abstract (en)

[origin: EP1655695A2] A remote maintenance system is comprised of : a monitoring computer (5) for monitoring a facility; and a monitoring center computer (9) for using maintenance management. The monitoring computer has a database for storing image data of the monitored facility. The monitoring center computer includes: a database (20) for storing CAD data for the monitored facility. The monitoring center computer provides coordinates to the image data sent from the monitoring computer, and superposes the image coordinate data and CAD coordinate data for the CAD. And the center computer locates a needed maintenance spot on the basis of a result of the superposition processing.

IPC 8 full level

**G05B 23/02** (2006.01); **G06F 13/00** (2006.01); **G06Q 10/06** (2012.01); **G06Q 50/00** (2012.01); **G06Q 50/10** (2012.01); **G06F 17/50** (2006.01)

CPC (source: EP US)

**G06Q 10/06** (2013.01 - EP US)

Citation (examination)

- US 2004183900 A1 20040923 - KARPEN THOMAS [US], et al
- KHALID W KHAWAJA ET AL: "A Multiscale Assembly Inspection Algorithm", IEEE ROBOTICS & AUTOMATION MAGAZINE, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 3, no. 2, 1 June 1996 (1996-06-01), pages 15 - 22, XP011089676, ISSN: 1070-9932
- DI MAURO E C ET AL: "Check! a generic and specific industrial inspection tool", IEE PROCEEDINGS: VISION, IMAGE AND SIGNAL PROCESSING, INSTITUTION OF ELECTRICAL ENGINEERS, GB, vol. 143, no. 4, 27 August 1996 (1996-08-27), pages 241 - 249, XP006006853, ISSN: 1350-245X, DOI: 10.1049/IP-VIS:19960692
- PARK H D ET AL: "CAD based planning and execution of inspection", PROCEEDINGS OF THE CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION. ANN ARBOR, JUNE 5 - 9, 1988; [PROCEEDINGS OF THE CONFERENCE ON COMPUTER VISION AND PATTERN RECOGNITION], WASHINGTON, IEEE COMP. SOC. PRESS, US, vol. -, 5 June 1988 (1988-06-05), pages 858 - 863, XP010012945, ISBN: 978-0-8186-0862-9, DOI: 10.1109/CVPR.1988.196333
- BAUER M ET AL: "A collaborative wearable system with remote sensing", WEARABLE COMPUTERS, 1998. DIGEST OF PAPERS. SECOND INTERNATIONAL SYMPOSIUM ON PITTSBURGH, PA, USA 19-20 OCT. 1998, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 19 October 1998 (1998-10-19), pages 10 - 17, XP010312820, ISBN: 978-0-8186-9074-7, DOI: 10.1109/ISWC.1998.729524
- MANN S: "Telepointer: Hands-free completely self-contained wearable visual augmented reality without headwear and without any infrastructural reliance", WEARABLE COMPUTERS, THE FOURTH INTERNATIONAL SYMPOSIUM ON ATLANTA, GA, USA 16-17 OCT. 2000, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 16 October 2000 (2000-10-16), pages 177 - 178, XP010526012, ISBN: 978-0-7695-0795-8, DOI: 10.1109/ISWC.2000.888489

Cited by

CN102929760A; EP2818948A1; EP2444922A1; CN104937615A; US9829873B2; EP4054915A4; WO2009083019A1; WO2014206622A1; WO2014116403A1; WO2012041454A1; TWI420269B; US11731676B2

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**EP 1655695 A2 20060510; EP 1655695 A3 20101222; EP 1655695 B1 20160914;** CA 2525776 A1 20060505; CA 2525776 C 20071106; EP 2388741 A1 20111123; EP 2388742 A2 20111123; EP 2388742 A3 20120328; EP 2388742 B1 20190109; JP 2006155584 A 20060615; JP 4661512 B2 20110330; SG 122058 A1 20060526; SG 133593 A1 20070730; US 2006136774 A1 20060622; US 2008086284 A1 20080410; US 2009177441 A1 20090709; US 7509236 B2 20090324; US 7756679 B2 20100713; US 8234095 B2 20120731

DOCDB simple family (application)

**EP 05024099 A 20051104;** CA 2525776 A 20051107; EP 11176139 A 20051104; EP 11176536 A 20051104; JP 2005293121 A 20051006; SG 200508501 A 20051104; SG 2007040579 A 20051104; US 26619105 A 20051104; US 39330709 A 20090226; US 90239007 A 20070921